

V A L D O S T A S T A T E U N I V E R S I T Y

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Critical Care Nurses' Attitude, Experience, and
Knowledge of Organ Procurement as Related to Their
Willingness to Approach Families for Donation

by

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Critical Care Nurses' Attitude, Experience, and Knowledge of Organ Procurement as Related to Their Willingness to Approach Families for Donation (under the direction of Dr. Karen S. Gingrow).

The purpose of this study was to determine the attitude, experience, and knowledge of registered nurses assisting in organ procurement process. The theoretical framework for this study was Orem's Self-Care Model and Roy's Adaptation Model. The research hypothesis is: There is a significant difference in the attitudes toward organ procurement of nurses who have an increased experience, and knowledge related to the procurement process.

A questionnaire design was used. A convenience sample of 15 subjects was obtained through the rural hospital. The instrument consisted of a demographic sheet, attitude test, experience test, knowledge test and one approach question. Although the results indicated a significant correlation in the attitude, and experience of nurses and their willingness to approach families. Knowledge indicated no significant results that would affect nurses willingness to approach families.

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CHAPTER I

Introduction

This chapter includes the statement of problem, background and significance, theoretical framework, research question, variable delineation, assumptions, definition of terms, limitations, and summary.

In today's highly technological health care profession, nurses are faced with new challenges each day at work. Nurses face the biggest challenge of all when they provide physiological and psychological care to critically ill patients and their families. This challenge becomes even bigger when nurses must inform families of an untimely death and then ask families to consider organ donation. As providers of care to clients and families, nurses are faced with the task of identifying potential organ donors.

Statement of Problem

The problem statement is: Critical care nurses' attitude, experience, and knowledge of organ procurement as related to their willingness to approach families for donation.

Background and Significance

The purpose of this study is to address the critical care nurse's attitudes, experience, and knowledge related to organ donation, as well as provide insight and information to help increase the number of potential donors available.

In some events potential organ donors have not been identified by nurses as potential donors. The majority of the literature review comes from the 1990's. This provides the foundation for this study and emphasizes the need for more information to help nurses provide quality health care in a timely manner to all seeking treatment.

The media constantly reminds the public of someone waiting for an organ transplant operation (Vernale, 1991). There is an estimate that 12,000 to 27,000 people will die each year who are potential donors and have not been identified by health care professionals. Closing the gap in numbers of organs needed and the number available is critical; not just from a numeric standpoint, but as a chance for a possible extension of life to many people (Vernale, 1991). The dramatic shortage increases each year as the gap between supply and demand grows larger.

The number of organs available lies in the hands of participating health care professionals through the cadaver organ procurement process (COPP), specifically, in identifying and referring potential donors. Most professional education programs have neither information or classes regarding the role of health care professionals in organ donation. The lack of education is a major barrier for nurses when they must participate or assist in the procurement process. This has affected the number of families approached by nurses. However, mandated routine

inquiry forced by legislation and the development of policies and protocols decrease the gap of organ supply and demand. Critical care nurses are in the forefront of this situation due to the number of traumatic and sudden deaths of clients seen in this setting. The opportunity to initiate positive interventions in all phases of cadaver organ procurement process can be done by these nurses as they provide holistic health care to their clients (Vernale, 1991).

Theoretical Framework

The theoretical framework for this study is derived from Dorothea E. Orem's self-care model and Sister Callista Roy's Adaptation model.

Orem's Self-Care Model

According to Orem's model "Nursing has as its special concern the individual's need for self-care action and the provision and management of it on a continuous basis in order to sustain life and health, recover from disease or injury, and cope with their effects" (George, 1985).

This model stresses that when an individual's self-care abilities are less than therapeutic the nurse will provide or compensate for self-care needs (Marriner-Tomey, 1989). Three nursing systems that Orem identified are: wholly compensatory, partly compensatory, and supportive-educative (George, 1985).

Wholly compensatory nursing system is represented when clients have no active role in their performance of care.

These clients are the ones for whom critical care nurses will provide total holistic care. They are totally incapacitated, mentally and physically, with no knowledge of their environment and no psychomotor activity. These clients are potential donors due to the nurses providing oxygenation, nutrient, elimination, body hygiene, range of motion exercises and sensory stimulation (George, 1985). Nurses protect and support this group of clients as nurses prescribe, design, and provide nursing care to clients and families (Marriner-Tomey, 1989).

A partly compensatory nursing system is when nurses assist clients in the performance of measures and actions of self-care. Clients who have had recent surgery will need assistance in hygiene, toilette, and ambulation. These clients will communicate the time, type and degree of care or assistance that is needed (George, 1985). As clients regulate their self-care activities toward independence nurses continue to assess their needs (Marriner-Tomey, 1989).

A supportive-educative system occurs when clients can and should learn to perform self-care without assistance. Nurses provide support, guidance, a developmental environment, and teaching. It is during this stage that nurses are helping human beings and not providing a tangible commodity. These actions are a deliberate attempt to change conditions in clients and their environments. Orem also

states that various factors influence expected role behaviors such as: culture, environment, age, sex, health setting, and finances (Orem, 1985). Roles of the nurse and client complement certain behavior. The client elicits certain behavioral responses from the nurse and by working together both can accomplish the goal of self-care for all clients (George, 1985).

Roy's Adaptation Theory

Sister Callista Roy's theory of nursing postulates that "the goal of nursing as the promotion of adaptive responses in relation to the four adaptive modes" (George, 1985). The four effectors are: physiological function, self-concept, role function, and interdependence. These modes have been further subdivided into the area of oxygenation, nutrition, elimination, activity and rest, skin integrity, senses, fluid and electrolytes, neurological function, and endocrine function. These modes' can be related to her assumptions:

1. "a system is a set of units so related or connected as to form a unity or whole
2. a system is a whole by virtue of the interdependence of its parts
3. systems have inputs, outputs and control and feedback processes
4. input, in the form of a standard or feedback, often is referred to as information
5. living systems are more complex than mechanical systems and have standards and feedback to direct their functioning as a whole" (Riehl & Roy, 1974).

This theoretical system prescribes a process used to analyze actions related to the care of the ill or

potentially ill client. This mode of nursing science developed a system that observes, classifies, and relates the processes positively as they affect a client's health status. Its purpose is to provide the essential service to people during the process of promoting health and illness (Marriner-Tomey, 1989). It is this phase or model that critical care nurses can implement as they seek potential donors.

As families experience a threat to their family unit, Orem's model emphasizes how self-care can be obtained to work through a crisis with the assistance of health care professionals; whereas Roy's model focuses on the adaptation changes in client physiological needs, this role function and interdependence relationship with health care professionals. These theories will provide a conceptual framework for an investigation of critical care nurses' attitude, experience, and knowledge toward identifying potential organ donors in the intensive care units.

Statement of Hypotheses

The research question for this statement is as follows: What is the critical care nurses' attitude, experience, and knowledge of organ procurement as related to their willingness to approach families for donation?

The research hypothesis is as follows: There is a significant difference in attitudes toward organ procurement of nurses who have an increased knowledge, and

experience related to the procurement process.

Variable Delineation

Independent and dependent variables are identified in this study. The independent variable will be the critical care nurses' attitude, experience, and knowledge of organ procurement. The dependent variable is their willingness to approach families for donation.

Assumptions

The following assumptions were made in this study:

1. the subject will respond honestly to the tool utilized for determining attitude, experience, and knowledge of organ procurement
2. the age, sex, and race of the subject will have no effect on the outcome of this study
3. the availability of organs is influenced by the willingness of nurses to approach families.

Definition of Terms

The operational definitions utilized in this study are:

Attitude A state of feeling or mind about a person or situation related to one's disposition or opinion. In this study attitude will be measured by a questionnaire.

Critical Care Nurse A registered professional nurse currently working in an intensive care unit.

Donor Client who gives vital organs to another client.

Experience direct observation or participation in events as a basis of knowledge. In this study experience is measured by years worked.

Knowledge A range of information or understanding acquired through years of experience. In this study knowledge will be measured by a questionnaire.

Limitations

The following limitations are recognized:

1. the instrument has not been previously tested
2. not all subjects are going to respond to the questionnaire
3. the population of the study is limited to registered professional nurses in one intensive care unit in one south Georgia community based hospital
4. results may not be generalized to other critical care nurses.

Summary

The purpose of the study, statement of the problem, and theoretical framework were discussed. The research question was stated. Assumptions and limitations of the study were indicated.

CHAPTER II

Review of literature

This chapter presents a review of the literature. Numerous studies have been written on the antecedents and solutions regarding the organ procurement shortage. Factors contributing to organ procurement are addressed.

Relevant Literature

A paradox has been created in our society due to increased awareness of organ donation and transplantation. Eighty-five percent of Americans approve of organ donation and seventy-five percent indicate desire to donate organs at their own death. Even health care professionals have indicated an over-whelming support for organ donation and would consider donation themselves. Yet, over twenty-one hundred (2,100) people are currently awaiting an organ transplant in the United States (Rushton, 1991).

The number of potential donors is more than adequate to meet current needs; but the demand has out weighed the supply of organs despite efforts to improve access to transplant services. Actual transplants have failed to keep pace with the need due to a shortage of donated organs (Vernale, 1991).

A variety of strategies are used to address the shortage of organs. Federal legislation has established

systems needed for organ procurement: equitable allocation strategies and Required Requests to Donate law. The critical link in the organ donation process is nurses and physicians whose central role is to emphasize the donation process. The American Association of Critical Care Nurses (AACN) also has affirmed the role of the critical care nurse in organ donation and transplantation through various organization position statements (Rushton, 1991). The news media has done a great deal to increase the public awareness of the need for organ donors. Statutes have been developed to allow individuals to decide to donate organs before an unexpected death (Packard, 1990). Chaplains have also become involved in the teamwork of organ donation.

Before the ultimate gift can be given, nurses must address their feelings about asking families to donate (Rushton, 1991). Studies have shown that nurses' attitudes and knowledge related to their degree of comfort in obtaining consent were correlated positively. Although most nurses were supportive of organ donation, they were very uncomfortable with some aspects of the cadaver organ procurement process and lacked knowledge about others. The nurses' own views and possible reluctance were communicated to families (Rushton, 1991). Some of the reasons for the lack of organs are: society does not accept brain death, lack of awareness and hesitation of medical community, dislike of discussing the matter with family at a time of

intense grief, lack of time, and concerns about legal issues as related to the cadaver organ procurement process (Stark, Reiley, Osiecki, and Cook, 1984, and Rushton, 1991).

Part of this can be overcome if Orem's self-care model is used. Orem describes three types of nursing systems, one is the system of providing care for people unable to care for themselves. This would include care of the brain-dead client and support of the family in coping with this loss. Feelings of powerlessness related to the loss may develop and nothing the family or anyone else can do will make their loved one better. If a nurse offers the option of donating organs, the nurse has provided a means through which the family can assume some control over the situation (Bidigare, and Oermann, 1991).

If critical care nurses engage in the process of self-reflection and assessment of the following: meaningful life, death and dying process, suffering, the organ donation process, and the justification for organ transplants. Rushton states that if nurses explore their own meanings for each of these concepts, they will have a wide variety of knowledge at their finger tips to help them ease through the steps of the cadaver organ procurement process (Rushton, 1991).

Nurses and other health care professionals must seek opportunities to participate in professional education seminars and continual education offerings on cadaver organ

procurement process to help increase their knowledge. AACN has offered participants at the annual National Teaching Institute the opportunity to clarify their values and to help develop skills in approaching families about donation and supporting them throughout the process. The National Kidney Foundation also offers seminars on cadaver organ procurement process. With a collective commitment and efforts, knowledge and attitudes of nurses can be addressed and effectively dealt with to overcome the catalyst that cadaver organ procurement process face (Rushton, 1991).

The Required Request law has not significantly improved the donor shortage since its passage in early 1985. The purpose of this law was to assure that all families were presented the option of organ and/or tissue donation at the time of their next of kin's death. This law was in response to public pressure and not pressure from the transplant community. The message was clear that the public was a strong proponent of organ and/or tissue donation. They want to alleviate the shortage of donors and assure that all families are given the option to donate organs. Problems have arisen from the implementation of these regulations. Most institutions have not given thought to the comfort level of professionals in talking with potential donor families. Studies have reflected that nurses have not received adequate information concerning donor criteria (Norris, 1990).

The ethical implications of organ transplantation have also affected the number of donors. Nurses lack consensus of society on the meaning of life and death. Code of ethics of the American Nurses Association states the basic guidelines for professional behavior. The classifications of the ethical theories includes the utilitarian moral reasoning "which gauges the worth of actions by their ends and consequences" (O'Connell, 1991). Utilitarian Theory looks for the greatest good by weighing the practical burdens or risks of organ transplants on clients, families and health care professionals. When the classic principles in health care are used: "first do no harm", and "good is to be done and evil is to be avoided"; they reflect classical ethical thinking that one ought not, of free choice, deliberately set out to destroy, impede, or damage any real good of human existence in ourselves or in others (O'Connell, 1991).

Informed consent also indicates ethical issues. One of the many roles of a nurse is patient advocate. Nurses must inform clients of their rights even if it's refusal to consent. New technologic advancements have changed the way the public views death. When nurses give correct information to clients and listen to their point of view, these problems are solved. The nurse advocacy role is manifested during the organ procurement process. As nurses work in highly technical areas of health care they will

continue to face many rising questions and find solutions as they continue a rewarding and fulfilling profession (O'Connell, 1991).

There are other problems faced in the cadaver organ procurement process. One is that nurses change jobs more than any other profession (Stark, Reiley, Osiecki, and Cook, 1984, and Davis, 1989). A lack of continuity in who asks the questions develop. Hospitals lack concern when faced with the organ procurement dilemma and their refusal to take a stand. Many hospitals feel that organ procurement open up a pandora's box of legal and ethical issues that require a court order to make a decision (Stark et al. 1984, and Davis, 1989).

Summary

The review of literature covered nurses knowledge and attitudes on cadaver organ procurement process. The literature indicates that most nurses are supportive of the organ procurement process. This chapter discussed the reluctance of nurses to approach families for consent. Research has indicated that few nurses have the knowledge and experience necessary to intervene and successfully meet the psychosocial needs of families seeking cadaver organ procurement process. Therefore; there is a need to determine critical care nurses perceptions of families psychosocial need.

Chapter III

Methodology and Procedures

This chapter includes a description of the research design, population and sampling, and description of research setting. Ethical considerations, instrumentation, data collection, and data analysis were also discussed.

Research Design

The purpose of this study is to determine critical care nurses' attitude, experience, and knowledge related to organ donation. Evaluative research design with a post-test was used. It ascertains how well a practice, procedure, or policy is meeting its objectives (Polit, et al, 1991). The Required Request law was implemented in 1985 to ensure that all families were given the option of organ and/or tissue donation. The investigator measured the willingness of nurses to approach families for donation.

The questionnaire is applicable to the investigation. The questionnaire is the collection of data from critical care nurses who have knowledge and experience in organ procurement. This design was used to determine the willingness of nurses to approach families and their attitudes of nurses.

Population and Sampling

A convenience sample was utilized in this research study. The population for this study were registered nurses

who work twelve hour shifts in one acute care community based hospital. The sample consist of fifteen registered nurses, fourteen females, and one male. Full-time or part-time registered nurses were eligible for the study. The participants completed the questionnaire that identifies demographical data, knowledge, experience, and attitude.

Ethical Considerations

Approval to conduct the study was obtained from the committee on the Protection of Human Subjects, Valdosta State University (Appendix A). The facility's president and director of nursing services signed a consent form for the agency's participation (Appendix B). Additionally, each subject signed a consent form (Appendix C) after the study was discussed by the investigator. Subjects' names were not used, thereby maintaining individual confidentiality and anonymity. Only group data is reported in the study.

Instruments

A 36 needs statement questionnaire was developed and utilized to obtain data concerning critical care nurses' willingness to approach families. The instrument which was used for the collection of data was developed by the investigator. Data requested included the subject's age, sex, marital status, ethnicity, previous nursing education, and experience in a health related field. Participants' attitude, and knowledge related to organ procurement were measured by yes/true, or no/false response. The instrument

is presented in Appendix D.

Data Collection

The unit participating in the study was selected from one acute care community based hospital in south Georgia. The investigator explained the process and implemented the questionnaire. Each questionnaire contained a cover letter that included the purpose of the study and instructions for completing the questionnaire. The nurse manager was requested to return the completed questionnaires within one week. To ensure anonymity of the participating subjects envelopes were not labeled with any identifying data.

A total of 15 registered professional nurses were available to complete the questionnaires. All 15 completed and returned questionnaires. This was a 100 percent response rate.

Data Analysis

All data analysis for this investigation was accomplished by following procedures outlined in the Statistical Package for the Social Sciences (SPSS) system developed by Nie, Hull, Jenkins, Steinbrenner, and Bent (1983). The SPSS is an integrated computer program used to analyzed social science data. The goal of the SPSS was to establish whether or not a difference was significant. Therefore, terms used to indicate the results of this study were not simply a matter of chance (Sprinthall, 1982). All data analysis for this investigation was accomplished by

using correlations of approach, attitudes, experience, and knowledge. As well as means, percentages, and frequency distributions of data.

Methodological Limitations

1. It was not possible for investigator to personally administer questionnaires
2. the instrument was not previously tested
3. results were not generalized to other critical care nurses.

Summary

Chapter III includes a description of the research design, population and sampling, and the research setting. Ethical considerations, data collection, and data analysis are addressed. The limitations occurring during the study were listed.

The sample consisted of registered professional nurses employed in an intensive care unit. The institution was located in south Georgia.

A questionnaire was utilized to collect data on nurses attitudes, experience, and knowledge related to their willingness to approach families for organ donation. Questionnaire responses were utilized to determine a mean value for each need statement. Mean scores were utilized to correlate the data for evaluation.

CHAPTER IV

Results

Chapter IV describes characteristics of the sample, and results of the findings are presented in this chapter. Variations in the descriptive data and the statistical results are also provided in tables in this chapter.

Characteristics of Sample

The sample consisted of 15 registered professional nurses employed in an intensive care unit. The age of the group ranged from 23 years to 54 years of age with a mean age of 38 years. The subjects in this study were predominately white (93%) and female (93%). The years of professional education of the subjects ranged from 2 to 6 years with a mean of 3.33 years.

Data were collected to determine the number of years the subjects have been registered professional nurses. The range was 1.5 years to 25 years with the mean of 10.96 years. Data pertaining to the number of years of experience in critical care nursing showed a mean of 6.693 years. Table 1 depicts the average of age, education, years as registered professional nurse, and number of years in intensive care unit.

Table 1

Demographical Data (N=15)

Variable	Mean	Standard deviation
Age	38.533	8.425
Education	3.333	2.093
Years as RN	10.960	7.343
Years in ICU	4.333	2.440

Finding

The purpose of this study was to investigate critical care nurses' approach toward organ procurement as related to attitude, experience, and knowledge. Data were collected utilizing a 36 need-statements questionnaire that had two choices for each need statement. The choices and their point values were: yes/true or no/false, with a point value of 1 for each correct answer. The need statements were divided into four groups: Approach, Attitude, Experience, and Knowledge. The approach grouped only one question which was identified as most important in the critical care nurses' willingness to approach families for donation. Fourteen need statements addressed attitudes. Eleven need statements addressed experience, and ten need statements addressed knowledge.

The statement identified as most important was:

Will you ask a potential family member to donate organs or tissues? Twelve of the 15 said yes they would approach a family and two said no. There was one missing case, for a total of 14 responses (See Table 2).

Table 2

Willingness to Ask for Organ Donation (N=15)

Variable	Yes	No	N/A
"Will you ask a potential family member to donate organs or tissues?"	12	2	1

The highest possible attitude score was 14; the highest possible experience score was 11; the highest possible knowledge score was 10 (See Table 3).

Table 3

Scores for Need Statements (N=15)

Variable	Possible	Mean	Standard Deviation
Attitude	14	10.600	2.667
Experience	11	9.667	1.447
Knowledge	10	7.733	2.604

Correlations among variables are shown in Table 4. A high positive correlation exists between attitude and experience ($r=0.82$); and both attitude ($r=-0.75$) and experience ($r=0.94$) are highly correlated with asking for organ donation. The poorer the attitude and the less experience, the less willing nurses are to ask for organ donation. Less knowledge was moderately associated with unwillingness to ask for organ donation (See Table 4).

Table 4

Correlations of Variables

Variables	Approach	Attitude	Experience	Knowledge
APP	1.0000	-.7521	-.9366**	-.6213
ATT	-.7521*	1.0000	0.8189**	0.4619
EXP	-.9366**	0.8189**	1.0000	0.6189
KNOW	-.6213	0.4619	0.6189	1.0000

2-tailed significant: * - .01 ** - .001

Further analysis was done on the two subjects who expressed unwillingness to ask for organ donation. A Z-test of their scores showed significant variance from the mean with regard to attitude and experience. Both subjects were more than -1.35 standard deviations from the mean for attitude; one subject was more than -4.00 standard deviations from the mean on experience. The knowledge score

of these two subjects who expressed an unwillingness were not significantly different from the other nurses in the study (See Table 5).

Table 5

Variance Scores of Subjects Unwilling to Ask for Organ Donation (n=2)

Variable	Mean	<u>Subject 6</u>		<u>Subject 15</u>	
	Group	Score	Z-Score	Score	Z-Score
ATT	10.60	7	-1.35	7	-1.35
EXP	9.67	3	-4.61	7	-1.84
KNOW	7.73	7	-0.28	7	-0.28

Summary

This chapter describes characteristics of the sample. Data were collected to determine registered professional nurses' willingness to approach families for organ donation. The mean score for each variable was calculated. Correlations of variables showed high to moderate associations among all of the variables. The more education, more knowledge, and better attitudes were associated with willingness to ask for organ donation.

The Z-score analysis of the two subjects who were unwilling to ask for organ donation reflected poorer attitudes and less experience than the group as a whole.

CHAPTER V

Conclusions, Implications, and Recommendations

This chapter presents the interpretation of results and conclusions of the study. Nursing implications and recommendations for future research are also discussed.

The purpose of this study was to determine critical care nurses' attitude, experience, and knowledge of organ procurement as related to their willingness to approach families for donation. A 36 item questionnaire statements was utilized for this study. A convenience sample consisting of 15 subjects participated.

The research hypothesis identified for this study is:

There is a significant difference in the approach toward organ procurement of nurses who have better attitudes, more experience, and increased knowledge related to the procurement process.

The instrument was divided into four groups with three independent variables, and one dependent variable. The dependent variable was measured by one question related to willingness to approach families for donation of organs.

Interpretation

Results indicated that attitude, experience, and knowledge of nurses did affect their willingness to approach families for donation. There was a significant correlation among all variables and the willingness to ask for organ

donation. The more knowledge, better attitude, and more education that nurses had, the more likely they were to ask families for organ donation. Attitude and experience may be more important indicators than knowledge because the two nurses who expressed unwillingness varied significantly from the group on these two factors, but they had similar knowledge scores.

Results of this investigation support, in part, studies of Rushton (1991) and Stark et al. (1984) who found attitudes and knowledge the most important factors affecting willingness to approach for organ procurement. Nurses attitudes toward organ procurement reflect the ambiguity of society's acceptance.

Nurses themselves indicated reluctance to donate their own organs; fewer than 15% answered positively about donating their own organs. Lack of experience did not prevent them from indicating willingness to approach patients; 86% stated they would approach families. In this sample only 35% of the nurses had actually cared for an organ or tissue transplant patient.

Conclusions

The research hypothesis states that: There is a significant difference in the approach toward organ procurement of nurses who have better attitudes, more experience, and increased knowledge related to the procurement process were supported. This was particularly

true for variables of attitude and experience. Recognizing the importance of attitudes and experiences of critical care nurses, creates the opportunity to change these factors, thus, affecting the approach for organ procurement.

Nursing Implications

Although the results of this study cannot be generalized; they have implications for nursing practice, education, and theory. In nursing practice, critical care nurses need to address their attitudes related to organ donation. Nurses must be aware that they may have to overcome personal feelings of organ procurement to approach families. As nurses continue to increase their knowledge and experience with organ procurement a supportive environment will grow.

In nursing education, curricula should include the ethical issues of organ procurement. The ethical discussions must also allow nurses to express attitudes on organ procurement. Nurses must be taught that holistic care includes psychosocial needs of family members. Practicing nurses could benefit from seminars and information on the patient-nurse-family interaction and how to focus upon the needs of the family and patient. Some families are comforted by the belief that the death of a love one was not a total loss.

In developing nursing theory, the results of this study can be utilized as support of Dorothea E. Orem's self-care

model that stresses nurses will provide or compensate for individual's self-care deficit to sustain life or support imminent death (Marriner-Tomey, 1989). Orem's self-care theory extends families making decisions related to plans after death. Sister Callista Roy's adaptation model postulates that nurses will promote an adaptive response in individuals and families approaching death (George, 1985). Nurses can utilize these theoretical frameworks to implement holistic care to patients and families as they go through the crisis of decision making related to organ procurement.

Recommendations

The following recommendations for future research were made:

1. replication of the study utilizing a larger sample size and a variety of geographic settings should be conducted.
2. replication of the study with a pre-test, cadaver organ procurement process education, and post-test to determine changes in nurses' attitudes.
3. replication of study to test the validity of instrument.
4. completion of a longitudinal study measuring the willingness of nurses to continue to approach families.

Summary

This chapter discussed the conclusions, implications, and recommendations of the investigation. The research

finding indicated that critical care nurses are willing to approach families for organ procurement. This willingness is associated with nurses' attitudes, experience, and knowledge. Findings of the study can be utilized by nurse educators in planning curricula that emphasize attitudes, and ethical issues.

It was recommended that further studies be implemented to determine if education can change nurses' attitudes and thus change their willingness to approach families for organ donation. Replication of this study in a variety of geographic settings with a larger sample size would facilitate generalization of the research findings.

References

- Bidigare, S. A., and Oermann, Marilyn H. (1991). Attitudes and knowledge of nurses regarding organ procurement. Heart & Lung, 20 (1), 24-29.
- Davis, Anne J. (1989). Clinical nurses' ethical decision making in situations of informed consent. Advances in Nursing Science, 11 (3), 63-69.
- George, Julia B., (1985). Nursing theories, (2th ed.). Englewood Cliffs: Prentice-Hall.
- Kiberd, M. C., Kiberd, B. A. (1992). Nursing attitudes towards organ donation, procurement, and transplantation. Heart & Lung, 2 (21), 106-111.
- Marriner-Tomey, Ann (1989). Nursing theorists and their work, (2th ed.). St. Louis: The C. V. Mosby Co..
- Nie, N. H., Hull, C. A., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. (1983). Statistical Package for Social Sciences. New York: McGraw-Hill.
- Norris, M. K. G., (1991). Nurses' perceptions of donor families' opinions: Implications for professional educational strategies. Heart & Lung, 20, (1), 42-45.
- Norris, M. K. G. (1990). Request: Why it has not significantly improved the donor shortage. Heart & Lung, 19 (6), 685-686.
- O'Connell, Delores A. (1991). Ethical implications of organ transplantation. Critical Care Nursing, 13 (4), 1-7.

- Orem, D. E. (1985). Nursing Concepts of Practice.
McGraw-Hill Book Company, New York.
- Polit, D. F. & Hungler, B. P. (1991). Nursing Research: Principles, and Methods (4th ed.). Philadelphia: J. B. Lippincott Co..
- Riehl, J. P., Roy, C. (1974). Conceptual Models for Nursing Practice. New York: Appleton-Century-Crofts.
- Roy, Sr. C. and Andrews, H. A. (1991). The Roy Adaptation Model: The Definitive Statement. Norwalk, Ct: Appleton- Century-Crofts.
- Rushton, C. H. (1991). Organ donation: It begins with you: Focus on Critical Care, 18 (4). 269-272.
- Sophie, L. R. et al. (1983). Intensive care nurses' perceptions of cadaver organ procurement. Heart & Lung, 3 (12), 261-266.
- Sprinthall, R. C. (1982). Basic Statistical Analysis. Reading, MA: Addison-Wesley Publishing Co.
- Stark, J. L., Reiley, P., Osiecki, A., and Cook, L. (1984). Attitudes affecting organ donation in the intensive care unit. Heart & Lung, 13 (4), 400-404.
- Vernale, C. (1991). Critical care nurses' interactions with families of potential organ donors. Focus on Critical Care, 18 (4), 335-339.
- Vernale, C., and Packard, S. A. (1990). Organ donation as gift exchange. Image, 22 (4), 239-242.

Appendix A
Consent to Human Subjects Committee

Dr. Ernestine H. Clark
Dean, Graduate School
Valdosta State University
Valdosta, Georgia 31698

Dear Dr. Clark:

I am requesting permission from the committee on the Protection of Human Subjects to conduct a research study titled "Critical Care Nurses' Attitude, Experience, and Knowledge of Organ Procurement as Related to Their Willingness to Approach Families", as partial fulfillment of the requirements for the Master of Science in Nursing at Valdosta State University.

This research study will be limited to critical care nurses employed in one south Georgia hospital. I will receive permission from the hospital Director of Nursing to conduct my research study. Each critical care nurse will be requested to complete a questionnaire that will take twenty (20) minutes of his/her time.

Participation will be voluntary and all information will remain confidential. Completion and return of the questionnaire will serve as consent for participation.

I am enclosing a copy of my proposal for your benefit.

Sincerely,

Hazel A. McIver
Graduate Nursing Student
Valdosta State University

AGENCY CONSENT FOR INVESTIGATION

Ms. Hazel A. McIver, R.N.C., B.S.N., a graduate nursing student at Valdosta State University, has explained the purpose and procedure of the research study titled, "Critical Care Nurses' Attitude, Experience, and Knowledge of Organ Procurement as Related to Their Willingness to Approach Families for Donation".

I understand that:

1. confidentiality of the staff/institution will be maintained
2. participation in the study is voluntary
3. twenty minutes or less of nursing staff time will be required to complete the questionnaire
4. no physical or mental harm will result from participation in this study
5. there is no payment or reward for staff or institution who participates in this study

Permission is granted for the investigation to be conducted in this facility.

Chief Executive Officer Signature and date

Director of Nursing Signature and date

Investigator's Signature and date

INFORMED CONSENT

Ms. Hazel A. McIver, R.N.C., B.S.N., a graduate nursing student at Valdosta State University, has explained the purpose and procedure of the research study titled, "Critical Care Nurses' Attitude, Experience, and Knowledge of Organ Procurement as Related to Their Willingness to Approach Families for Donation". I understand that:

1. my privacy and confidentiality will be maintained
2. participation in the study is voluntary and I may withdraw from the study at any time
3. the study will require less than twenty minutes of my time
4. there will be no physical or mental harm to me as a result of my participation in the investigation
5. there is no payment or reward for participation in this study

I will participate in this research titled, "Critical Care Nurses' Attitude, Experience, and Knowledge of Organ Procurement as Related to Their Willingness to Approach Families for Donation", as it has been explained to me.

Investigator's signature & date

Participant's signature & date

Witness signature & date

Witness signature & date

Questionnaire

We are interested in knowing about your education, professional experience, and current work environment. Please check one answer, unless otherwise indicated.

Section I

1. What is your age? _____ yrs
2. What is your sex? _____ female _____ male
3. What has been your nursing education? Please check as many as apply:
____ diploma ____ AD ____ CCRN ____ BSN ____ working on BSN
____ MSN ____ working on MSN ____ PHD
other degree (s) (please specify) _____
4. Do you belong to any professional nursing organizations?
If yes, please list:

5. How many years of experience do you have as a nurse? _____

6. How many years of experience do you have as a nurse in an ICU setting? _____ yrs
7. What type of ICU do you work in? _____ CCU _____ MICU
____ SICU _____ Thoracic _____ Neuro
____ Other (please specify) _____
8. How many hours per week do usually work? _____ hr/wk
9. What shift do you usually work? ____ days ____ evenings
____ nights

Section II

Attitudes toward caring for potential organ donors and their families. The following questions focus on how you feel or would feel about caring for clients who are organ donors and their families.

Please answer yes or no to indicate your answer to each question.

1. Have you signed a donor card/or license? ☐yes ☐no
2. Do you support organ donation? ☐yes ☐no
3. Would you be an organ or tissue donor? ☐yes ☐no
4. If so, would you place a restriction on your donation?
☐yes ☐no
5. Have you discussed your wishes with your family?
☐yes ☐no
6. Do you feel organ or tissue transplantation is
beneficial? ☐yes ☐no
7. Is organ or tissue transplantation worth every penny
(cost effective)? ☐yes ☐no
8. Have you cared for an organ or tissue transplantation
patient? ☐yes ☐no
9. Would you refuse to provide care to an organ or tissue
transplantation patient? ☐yes ☐no
10. Has a family member received an organ or tissue
transplant? ☐yes ☐no
11. Has a member of your family been an organ or tissue
donor? ☐yes ☐no

Section III

The following questions concern your knowledge and experience in caring for organ and tissue donors, families, and your source of information.

Please answer yes or no to indicate your answer to each question.

1. Have you ever cared for a donor client? ☐yes ☐no
2. Do you know a family who has donated organs or tissues? ☐yes ☐no
3. Will you ask a potential family member to donate organs or tissues? ☐yes ☐no
4. Have you attended any educational offerings on organ or tissue procurement in the past two years? ☐yes ☐no
5. Have you a family member who has received an organ or tissue transplant? ☐yes ☐no
6. Have you ever assisted in identifying, maintaining or procuring organs or tissues from a donor? ☐yes ☐no
7. Is organ or tissue procurement a professional responsibility? ☐yes ☐no
8. Do you have clear written protocols reference to organ or tissue procurement? ☐yes ☐no
9. Is there a strong commitment on the part of the medical staff in their asking the families to donate organs or tissue. ☐yes ☐no
10. Are you actively involved or supportive of the organ procurement process? ☐yes ☐no

Please indicate your answer to the following questions by answering true (T) or false (F).

- | | T | F | |
|-----|--------------------------|--------------------------|---|
| 11. | <input type="checkbox"/> | <input type="checkbox"/> | Only medicare and medicaid families are asked to be organ or tissue donors. |
| 12. | <input type="checkbox"/> | <input type="checkbox"/> | Families should talk about organ donation before tragedy happens. |

- | | T | F | |
|-----|-----|-----|---|
| 13. | ___ | ___ | Children should not be involved in organ and tissue donation discussion by the adult family members. |
| 14. | ___ | ___ | The act of donation is a positive one and not intended to produce additional stress. |
| 15. | ___ | ___ | Organ and tissue donations should not be considered for every death. |
| 16. | ___ | ___ | The most important issue is to give families an option to donate and then support that decision. |
| 17. | ___ | ___ | Death is considered when the heart stop beating and not when the brain ceases to function. |
| 18. | ___ | ___ | Federal and state laws prohibit the buying and selling of organs and tissues. |
| 19. | ___ | ___ | The recovery of organs and tissues will disfigure the body. |
| 20. | ___ | ___ | The removal of organs and tissues will interfere with the customary open casket. |
| 21. | ___ | ___ | Major religions do not support organ and tissue donation. |
| 22. | ___ | ___ | Donor families feel guilt and shame after donating a family member's organ. |
| 23. | ___ | ___ | A new person is added to the waiting list for an organ or tissue transplantation every thirty (30) minutes. |
| 24. | ___ | ___ | Over one-third (1/3) of those awaiting heart, liver, and lung transplants will die without ever having had that second chance of life. |
| 25. | ___ | ___ | Eyes, bone, skin, and certain other soft tissues can be donated six to twenty-four hours after the heart has stopped, depending on age and circumstances surrounding death. |